

C. REMARKS

In the Office Action of 24 November 2004, claims 1, 3-10, and 12-15 were rejected under 35 U.S.C. § 103 as being obvious over U.S. Patent No. 5,685,804 to *Whan-Tong et al.* in view of U.S. Patent No. 6,056,670 to *Shu et al.*; claims 2 and 11 were rejected under 35 U.S.C. § 103 as being obvious over U.S. Patent No. 5,685,804 to *Whan-Tong et al.* in view of U.S. Patent No. 6,056,670 to *Shu et al.* in further view of U.S. Patent No. 3,765,245 to *Hampl.* For the reasons set forth below, these rejections are respectfully traversed.

The present application describes a self-powered fitness device that simulates various types of stepping motions. The device includes a frame, a guide movably associated with the frame, and first and second foot supports coupled to the guide. The device further includes a generator coupled to the first and second foot supports, which is actuated to produce power by the user's stepping motions. The device also includes a battery coupled to the generator to store at least part of the power produced by the generator. The device includes a lift system for automatically changing at least one of the elevation and the angular orientation of the guide relative to the frame. Since the lift system is powered by both the generator and the battery, actuation of the lift system will not alter the resistance to the user pedaling the foot supports during exercising.

U.S. Patent No. 5,685,804 to *Whan-Tong et al.* ("*Whan-Tong*") describes an exercise device. A pair of foot engaging links is provided. The rearward ends of the foot links are supported for rotational motion about a pivot axis, and the forward ends of the foot links reciprocate back and forth along a guide. The combination to these two-foot link motions permits the user's feet to travel along an elliptical path of travel. The inclination and/or elevation of the guide may be selectively altered to vary the nature of the stepping motion experienced by the user.

Initially, the Office Action argues that *Whan-Tong* "discloses all of applicant's claimed invention except for the use of electrical energy storage and a microprocessor powered by a generator." Applicants respectfully disagree. *Whan-Tong* provides for "a standard amperage AC 110 volt power supply." Thus, in addition to lacking electrical energy storage and a generator powered microprocessor, *Whan-Tong* does not describe, teach or suggest a

“generator [] coupled to the foot support to produce electric power by the user's stepping motions acting on the foot support” or a “lift system [] powered by both the generator and the electric energy storage medium.” For this reason alone, the rejection of claims 1-15 should be withdrawn.

In addition, the Office Action argues for the combination of *Whan-Tong* with U.S. Patent No. 6,056,670 to *Shu et al.* However, these references are devoid of any suggestion or motivation to combine. As previously seen, *Whan-Tong* provides for “a standard amperage AC 110 volt power supply” to a stationary exercise device. More specifically, *Whan-Tong* provides **both** a direct current system, that applies braking force to the braking system and power to the display panel, and an alternating current to a lift mechanism that adjusts the angular orientation of the guide or tracks. A transformer is also provided to transform the “standard amperage AC 110 volt power supply” into DC power for the braking system and display panel. Thus, by addressing the need to provide both a.c. and d.c., *Whan-Tong* actually **teaches away** from use of a generator. For this additional reason, the rejection of claims 1-15 should be withdrawn.

U.S. Patent No. 6,056,670 to *Shu et al.* (“*Shu*”) describes a power controlled climbing machine. A rechargeable battery is used to maintain the climbing machine operative for a time-out period; at all other times the climbing machine is powered by the user. The climbing machine utilizes a dynamically controllable load or alternator that is controlled by a computer circuit to maintain the power input into the climbing machine or to maintain power input by the user into the input unit at a predetermined approximate power level, or to maintain metabolic power of the user at a predetermined level when the user is inputting power into the input unit, regardless of the speed of the climbing machine or the actual or effective weight of the user. The alternator is dynamically controlled by pulse width modulating its field coils. The power output by the generator is sensed by monitoring the alternator's output current and voltage. Additional load control is achieved by dissipating part of the alternator current in a dissipative load when the alternator voltage reaches a predetermined maximum set point.


Initially, *Shu* describes a climbing machine while the presently claimed invention includes a guide movably associated with the frame. In machines such as *Shu* there would be no reason to vary the angle of the climb and thus provide a movable guide. Thus, not only is there

no motivation to combine, *Shu teaches away* from use of a movable guide. For this additional reason, the rejection of claims 1-15 should be withdrawn.

As stated above, nothing in *Whan-Tong* or *Shu* suggests a modification of an AC powered exercise device and a climbing machine utilizing a dynamically controllable alternator to produce the present design, to do so, would be to include impermissible hindsight. Therefore, it is respectfully submitted that all of the claims recite patentable subject matter and are in condition for allowance. Accordingly, favorable reconsideration and allowance of the application is respectfully requested.

Respectfully submitted,

Date 21 February 2005
Precor Incorporated
Amer Sports North America
8700 W. Bryn Mawr Avenue
Chicago, IL 60631

By 
Terence P. O'Brien
Attorney for Applicants
Registration No. 43,840

Telephone: (773) 714-6498
Facsimile: (773) 714-4557